

ADDITIONAL INFORMATION REQUIRED FOR COGENERATION CASES
(To be furnished through appraising financial institution/scheduled bank)

1. Plant code and short name of the sugar factory. In case plant code is not allotted; letter issued by Directorate of Sugar indicating that the sugar factory has been "taken on record" may be submitted.
2. Copy of I.E.M. issued by Ministry of Commerce and Industry.
3. Installed crushing capacity (TCD)
4. Crushing capacity under expansion, if any. If so, expanded capacity (TCD)
5. Date of commencement of sugar manufacturing
6. Proposed days of operation of sugar factory
7. Present power generation capacity
8. Copy of Power Purchase Agreement
9. Proposed days of operation of power plant
10. Does undertaking have any other sugar factory, if yes, details thereof may be furnished
11. Date of application to financial institution for appraisal of the project
12. Date of appraisal of the project
13. Whether project commissioned prior to date of application to FI or Scheduled Bank
14. Whether second hand equipment / machinery involved
15. Is there any refinancing
16. Status of implementation of project, clearly indicating expected date of commissioning of the project
17. Copy of NOC from State Pollution Control Board
18. Copy of Environment Impact Assessment (EIA)
19. Credit record with financial institutions / Banks (indicating whether it is satisfactory / good or otherwise)

20. A certificate from the appraising bank to the effect that all dues, whether outstanding or otherwise to Government or any other lending Institution have been taken into account while working out financial viability.
21. Undertaking regarding no outstanding SDF/LSPEF dues against the sugar factory and company / society as a whole.
22. Quantity of bagasse generation (in Metric tons) from existing crushing capacity, if any;
23. Quantity of bagasse generation (in Metric tons) from proposed crushing capacity, if any;
24. Quantity of bagasse required (in Metric tons) to generate existing power generation, if any, during 160 days)
25. Quantity of bagasse required (in Metric tons) to generate proposed power during 160 days
26. Confirmation whether after implementation of project existing power generation plant, if any, will be retired.
27. Details of outstanding SDF loan taken by sugar factory / company as a whole
28. Average DSCR of the factory (sugar + power + distillery) along with calculation sheet
29. Average DSCR of the company / society as a whole along with calculation sheet
30. IRR of the project along with calculation sheet
31. FACR of the factory (sugar + power + ethanol) based on latest balance sheet, along with calculation sheet
32. FACR of company / society as a whole based on latest balance sheet, along with calculation sheet separately. (FACR may be furnished applying the formula as follows):

(Net value of fixed assets + work in progress)

All secured loans, including the proposed one

33. Item wise detailed breakup of proposed expenditure to be incurred on building and civil works, plant and machinery and misc. fixed assets separately for the co-gen project.
34. Details of amount of term loan sanctioned by Bank (s) /financial institution(s), specifically for cogeneration project
35. Nature of security for SDF loan proposed to be furnished. In case it is proposed to furnish 2nd exclusive charge then reasons for not giving the first charge may be obtained from TL lending banks and furnished.
36. Amount of CEN-VAT available on excise duty paid on the cost of plant and machinery

37. Operational results (during last 4 years before implementation of the project and future 4 years after implementation of the project, in chronological order indicating the years):

S. No.	Items	Past performance				Future projections			
		1 st year	2 nd year	3 rd year	4 th year	1 st year	2 nd year	3 rd year	4 th year
1.	Capacity of sugar unit (TCD)								
2.	Crushing days (duration of season)								
3.	Cane crushing by the factory (LMT)								
4.	Cane area (in hect.)								
5.	Availability of sugarcane (Tonnes)								
6.	Production of Bagasse								
7.	No. of days of Co-gen plant operation during season & off-season								
		Existing				1 st year	2 nd year	3 rd year	4 th year
8.	Steam generation capacity of each boiler in TPH								
9.	Working pressure & temperature of each boiler								
10.	Drawl of steam in TPH from each boiler								
11.	Stem-Fuel ratio of each boiler								
12.	Bagasse required for generation of steam in each boiler (for 160 days)								
13.	Bagasse saved for off-season								
14.	No. of Turbo-generators								
15.	Turbo-generators type & rating								
16.	Specific steam consumption of TG set(s)								
17.	Inlet steam condition a. Pressure b. Temperature								
18.	Extraction condition (i) a. Pressure b. Temperature								

	c. Quantity					
19.	Extraction condition (ii) a. Pressure b. Temperature c. Quantity					
20.	Extraction condition (iii) a. Pressure b. Temperature c. Quantity					
21.	Steam flow to condenser a. Pressure b. Temperature c. Quantity					
22.	Exhaust Pressure & Temperature in case of Back Pressure Turbine					
23.	Gross Power Generation a. during Season b. during off-season					
24.	Captive power consumption(season) a. for Sugar Plant b. for Co-gen auxiliaries c. for Distillery, if any d. for General lighting & colony e. any other requirement					
25.	Captive power consumption(off- season) a. for Sugar Plant b. for Co-gen auxiliaries c. for Distillery, if any d. for General lighting & colony any other requirement					
26.	Marketable / Exportable Power: a. Season b. Off-season					
27.	Transmission losses					

28.	Annual Energy sale								
29.	Bagasse price at site								
30.	Power tariff i.e. Rate (Rs. / MW)								
31.	Plant load factor								

38. Heat Mass Balance Diagram for the proposed steam-power generation

39. Steam consumption % cane indicating details (steam requirement for juice heating, evaporation, de-aerator, sulphur melting, centrifugals, par washing, LP/HP heaters, radiation and condensation losses etc.)

40. Evaporator Configuration and vapour bleeding system

41. Net profit / (loss) (during last 3 years, in chronological order indicating the years):

		1 st year	2 nd year	3 rd year
1.	Net profit / (loss) after tax (Rs. In Lakh) (society as whole)			

42. Net worth of society / company (during last 3 years, in chronological order indicating years)

Items	1 st year	2 nd year	3 rd year
Net worth			

43. Assumptions taken in the project appraisal for profitability estimates (in chronological order indicating the years)

S. No.	Particulars	1 st year	2 nd year	3 rd year	4 th year onwards
1.	No. of crushing days				
2.	Cane crushed (LMT)				
3.	Production of power MW/hr during season				

	• during off season				
4.	Cane price including purchase Tax (Rs. / ton)				
5.	No. of days of operation of Power plant • during season • during off season				
6.	Average selling price of Power (Rs. / kwh)				

44. Assumptions taken in the project appraisal for availability of raw material
(in chronological order indicating the years)

S. No.	Items	1 st year	2 nd year	3 rd year	4 th year onwards
1.	Cane area (in hect)				
2.	Total Cane production (LMT)				
3.	Cane crushing taken in Financial appraisal (LMT)				
4.	Production of bagasse				

45. Assumptions taken in project appraisal for net profit / (loss)
(in chronological order indicating the years):

Particulars	1 st year	2 nd year	3 rd year	4 th year onwards
Net profit / (loss) after tax (Rs. in lakh) (company / society as whole)				